## CLAIMS

What is claimed is:

5

1. A method for processing names by a naming service within a data processing system, the method comprising:

obtaining an application name that is associated with an application;

obtaining a deployment name that is associated with a deployment attribute that characterizes a deployment of an instance of the application; and

generating an application-based name for the instance of the application, wherein the

- application-based name represents a context within a naming system, and wherein the application-based name is a compound name that comprises the application name and the deployment name.
- 20 2. The method of claim 1 wherein a deployment attribute is a metadata value that characterizes a manner in which the instance of the application is deployed within the data processing system.
- 25 3. The method of claim 1 wherein the application-based name comprises the application name and multiple deployment names associated with multiple deployment attributes.

- 4. The method of claim 1 wherein a deployment attribute is selected from the group comprising: a deployment identifier, wherein a deployment identifier is a unique identifier associated with the deployment operation,

  5 wherein the deployment identifier is unique over all deployment operations within the data processing system or is unique over all deployment operations for all instances of the application within the data processing system; a version identifier or an edition identifier associated with a version of the application; or some other identifier for a deployment-associated characteristic or metric.
  - 5. The method of claim 1 further comprising: binding the application-based name to a data object.
    - 6. The method of claim 5 further comprising: relating the data object to a context for an application server.

20

15

- 7. The method of claim 1 further comprising: resolving the application-based name to a previously bound data object.
- 25 8. The method of claim 1 wherein an application comprises a plurality of application modules, wherein each module is associated with a module name, and wherein each module is associated with an application-based name based on its module name.

9. An apparatus for processing names by a naming service within a data processing system, the apparatus comprising:

means for obtaining an application name that is associated with an application;

means for obtaining a deployment name that is associated with a deployment attribute that characterizes a deployment of an instance of the application; and

means for generating an application-based name for the instance of the application, wherein the application-based name represents a context within a naming system, and wherein the application-based name is a compound name that comprises the application name and the deployment name.

15

5

10. The apparatus of claim 9 wherein a deployment attribute is a metadata value that characterizes a manner in which the instance of the application is deployed within the data processing system.

20

11. The apparatus of claim 9 wherein the application-based name comprises the application name and multiple deployment names associated with multiple deployment attributes.

25

25

30

- 12. The apparatus of claim 9 wherein a deployment attribute is selected from the group comprising: a deployment identifier, wherein a deployment identifier is a unique identifier associated with the deployment operation, wherein the deployment identifier is unique over all deployment operations within the data processing system or is unique over all deployment operations for all instances of the application within the data processing system; a version identifier or an edition identifier associated with a version of the application; or some other identifier for a deployment-associated characteristic or metric.
- 13. The apparatus of claim 9 further comprising:

  15 means for binding the application-based name to a data object.
- 14. The apparatus of claim 13 further comprising:

  means for relating the data object to a context for

  an application server.
  - 15. The apparatus of claim 9 further comprising: means for resolving the application-based name to a previously bound data object.
  - 16. The apparatus of claim 9 wherein an application comprises a plurality of application modules, wherein each module is associated with a module name, and wherein each module is associated with an application-based name based on its module name.

10

15

20

- 17. A computer program product in a computer-readable medium for use in a data processing system for processing names by a naming service, the computer program product comprising:
- 5 means for obtaining an application name that is associated with an application;

means for obtaining a deployment name that is associated with a deployment attribute that characterizes a deployment of an instance of the application; and

means for generating an application-based name for the instance of the application, wherein the application-based name represents a context within a naming system, and wherein the application-based name is a compound name that comprises the application name and the deployment name.

- 18. The computer program product of claim 17 wherein a deployment attribute is a metadata value that characterizes a manner in which the instance of the application is deployed within the data processing system.
- 19. The computer program product of claim 17 wherein the application-based name comprises the application name and multiple deployment names associated with multiple deployment attributes.

- 20. The computer program product of claim 17 wherein a deployment attribute is selected from the group comprising: a deployment identifier, wherein a deployment identifier is a unique identifier associated with the deployment operation, wherein the deployment identifier is unique over all deployment operations within the data processing system or is unique over all deployment operations for all instances of the application within the data processing system; a version identifier or an edition identifier associated with a version of the application; or some other identifier for a deployment-associated characteristic or metric.
- 21. The computer program product of claim 17 further comprising:

means for binding the application-based name to a data object.

22. The computer program product of claim 21 further comprising:

means for relating the data object to a context for an application server.

23. The computer program product of claim 17 furthercomprising:

means for resolving the application-based name to a previously bound data object.

- 24. The computer program product of claim 17 wherein an application comprises a plurality of application modules, wherein each module is associated with a module name, and wherein each module is associated with an
- 5 application-based name based on its module name.